Transfer of Development Rights :

New Tool and Technique for

Urban Development and Historic Preservation

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INTRODUCTION

During the past decade, many local government officials and planners in USA in responding to changing citizen attitudes, have begun to reasses the course of their land use decisions. More and more, they are contempleting preservation activities, environmental impact review, and even at the extreme, no-growth alternatives. Emphasis is being placed on the protection of public interest in land through regulatory exercises of the police power. Meanwhile, there are growing state and federal efforts toward environmental protection and land use management.

As attitudes and economic conditions are changing, so too are the adminstrative interpretation of traditional land-use control mechanisms. Among this transitional activity, a land-management device has emerged which is based on the underlying principle that the development potential of privately held land is in part a community assert that government may allocate to enhance the general goals. This land-management device is called "Transfer of Development Rights (TDR)". In concept, development rights are severed from one parcel of land and transfered to another. TDR severs the development potential from the land and treats it as a separately marketable item. It is viewed by its proponents as a mean of providing an equitable return on land investment to property owners whose return otherwise might be lessened by regulatory activity.

TDR is the most innovative, imaginative, and potentially effective technique of land use control to be proposed since the introduction of zoning and subdivision regulations. TDR may be used to accomplish numerous and diverse planning goals and objectives beyond the scope of any other technique of land use control. It can provide more effective control of land use than zoning; it can be used to preserve historical and architectural landmarks in central cities; it can be used to povide public amenities in high density urban areas; it can preserve flood plains, woodlands and wetlands for ecological regeneration; it can protect agricultural land from the pressure of high taxation and development opportunities. TDR can be used to achieve all of these goals without any direct cost to the government.

In USA recently the growing interest inTDR is no longer the exclusive preserve of academics, but is being considered increasingly as a viable public policy alternative. Such considerations raise a number of issues regarding the legality, economics, and politics of TDR. Most discussions of TDR have explored the concept from a theoretical perspective, little informed by the field experience

that has developed over the past several years. The purpose of this paper, therefore, is to study the basic concept of TDR and to focus on New York City experience in using TDR as an additional tool to preserve historical landmarks. Greater emphasis will concentrate only on planning process, even though legal aspect and others are essential too.

THE CONCEPT OF DENSITY TRANSFER

Transferable development rights (TDR) works as follows. A planning authority establishes a conservation area where development is restricted and a transfer area where development can occur. Owners of restricted parcels are issued development rights, which may be transfered to parcels in the areas approved for development to allow more intensive use. The rights may be sold or the owner of the restricted area may use them on land that he owns in the transfer area. These development rights in effect compensate the owner of conservation-zoned land for the wipeout caused by the restrictions there.[1]

A conceptual key to TDR is the notion that the development potential of a parcel may be severed from the physical location of that parcel. There are a number of precedents for such severance in current American legal practice. For example, sales of air rights are becoming more common. A farmer may sell the development rights on his parcel to a nearby community that wishes to maintain a greenbelt. The farmer keeps the land and community gets the development rights; the two are severed.

EXISTING CONCEPTS SIMILAR TO TDR

Transferance of the ownership of development potential, the basic principle of TDR, has analogous precedent in at least three areas : air rights transfer, sale of water rights, and certain oil and gas production regulations.[2] In selected examples from these categories, there is actual transferance of the restricted development potential to another site.

1. Air Rights Transfer

Airspace is subjected to the same legal principles as other lesser-than-fee interests in land. It can be owned separately and apart from the land, and it can be conveyed, leased, and subdivided in approximately the same manner as land.[3]

Two major types of airspace or air rights transfer can be distinguished. First, there are cases in which the landowner has not built anything upon the land and sells this air rights to those who seek to keep the land in open space.[4] Then, there are those instances where there has been development, but it is such that additional use of the site's air rights can be made. Examples of these are the constructions of building above railroad lines and above highways.[5]

2. Sale of Water Rights

The allocation of water rests on the fundamental notion of "first in time, first in right". That is, the first person to use the water acquires the right to its future use as against later users. It would be expected that high-value users, such as cities and industries, would purchase water rights from low-value users, such as some agricultural owners of water rights.

The sale of water rights often means the sale of development rights and their transference to another parcel of land. Water is a necessity for almost any type of land use in Western States of USA. Therefore, the price of a parcel's water rights is determined by the loss of its development and agricultural potential.[6]

3. Oil and Gas Production Regulation

Oil and gas commonly occur together in a pool that underlies the parcels of numerous owners. Primary recovery of these resources relies upon naturally existing pressures to force the oil and gas to the surface. When too many wells are drilled into the pool, these pressures are quickly dissipated and expensive secondary recovery techniques must be used in order to continue production. A history of wasteful competitive practices led to the institution of regulations to prevent the interests of individual landowners from harming the others who shared in the development potential of the pool of oil located under their properties.

For the benefit of all landowners over the pool, the right to develop oil and gas is taken from them and granted to the pool operator. Development is viewed as a joint opportunity and a joint responsibility, and for maximum benefit individual development decisions are curtailed.[7]

This experience is relevant to the TDR concept. It illustrates that to create the best type of development, the state's police power is used to restrict private landowners from developing their own property. In return for this restriction, since they share in the development potential of the pool, they also share in the profit or loss generated by its development.

PROPOSED USES OF TDR

Basic Principles

As with air rights transfer, sale of water rights, and oil and gas production regulation, TDR views the right to develop as something severable from a specific parcel of land and which may be attached to a different parcel.

TDR is also an expansion of the cluster subdivision and planned unit development (PUD) concepts. Rather than applying to a single parcel, however, TDR involves a type of "community cluster" or "community PUD". Overall community density under TDR stays the same ; it is the location of that density within the community which changes.

In reviewing the many proposals for the use of TDR, three basic variations emerge.[8] TDR has been proposed and used in preservation of historic buildings, has been proposed and used for agricultural / open space preservation, and has been proposed as an alternative to zoning. After a general discusion of these variations, selected specific example will be focused on historic preservation.

1. Historic Preservation

Early density transfer proposals to preserve historic structures involved the simple transfer of density to contiguous property. The unused floor area from the historic structure was suggested to be transfered to allow a taller building to be constructed on the adjacent property. Either by the owner of the historic structure sold the unused potential and a deed restriction would recorded, or he would sell the parcel of land

along with the structure to the adjacent property owner who then would apply the balance of the overall parcel's floor area to the building to be constructed. (see figure 1)

The unused floor area can also be transfered to properties which are not contiguous. In this case, a planning district would be established within which both historic sites and transfer sites would be designated. Destruction of the historic structures would be prohibited, but these landowners could sell their unused density to be applied in the construction of one or more buildings, which would then exceed their normally allowed floor area by the amount purchased from the historic site. (see figure 2)

2. Agricultural/Open Space Preservation

TDR can be used to preserve prime agricultural land or open space. First, sites to be preserved are identified, as well as sites which have the ecological and present or future infrastructure capacity to handle additional density. Once these parcels are selected, the designated agricultural / open space land is placed under a conservation zone classification, thereby restricting development. The development which would have been permitted there can then be sold to the owners of transfer zone land to allow them to build at an increased density. Once again, overall density for the planning district remains the same. The density is just clustered in those areas most suited for development.[9]

3. Alternative to Zoning

Zoning has not proved to be the solution to community growth and development problems as was forecast in the 1920s. What has resulted is a system often inequitable in its application, often resulting in undesirable patterns of development, and often creating artificially high land values. It has been suggested that zoning could be replaced by TDR system which would alleviate these shortcomings.[10]

CURRENT PROGRAMS AND PROPOSALS

The above discussion outlined in general term the three major variants of TDR concept. There have been a number of proposals for the use of each variant, some more feasible than others.

Planners and lawyers have begun to experiment with a variety of techniques to use the transfer of development rights for purposes of land use regulation. Up to the present time, there are considerable numbers of programs and proposals.[11] Many cities have given TDR serious consideration.

– New York City and Chicago utilized it for the preservation of landmark.

– In New Jersey legislation was proposed to use TDR to preserve open space.

– The ecologically fragile Phosphorescent Bay in Peurto Rico will be preserved by TDR technique.

– Legislation has been prepared in Maryland and proposals are being developed in Fairfax County, Virginia, and Sonoma County, California, to use TDR as a primary system of land use regulation.

– Southampton, Long Island, New York has adopted on ordinance using TDR to encourage construction of moderate and low income housing.

– St. George, Vermont uses the transfer of development rights as a device for regulating community growth.

– It is being studied as one of the technique for eliminating unconscionable profits (windfalls) or losses (wipeouts) to landowner resulting from government regulation of land use.

THE NEW YORK CITY EXPERIENCE

The pioneer in the use of transferable development rights is the city of New York. New York TDR has been used for both landmark and open space preservation.

Landmarks were endangered both by zoning ordinance's encouragement of new office buildings and by urban economics. Older building not only enhanced the city's character through their historic association and architectural significance ; they also provided wells of light and air amid the skyscrapers. Yet their economic return could never approach that of the office towers that might replace them, so the urge to demolish was overwhelming.

New York's use of TDR evolved from a series of amendments to the Zoning Resolution made since 1961.[12] First, the definition of "zoning lot" was changed to allow the merger of two separate but contiguous zoning lot when they came under common ownership. This permitted the construction of a taller building by clustering the unused development potential of both parcels onto one. Thus, in order to solve the dilemma of a landmark structure which was already surrounded by development on all contiguous lots, the city permitted unused development right to be transferred across the street. This provided another mean by which the city could equitably handle the possible negative economic impact of designations under the Landmarks' Preservation Law.[13] (In April 1965, the New York city council enacted the Landmark Preservation Law, which created the Landmark Preservation Commission. That Commission can designate any appropiate structure or site as a landmark ; it can also name any area of the city possessing special historical, aesthetic, or architectural interest as an historic district. Both designations are made only after a public hearing, and must be approved by the city's Board of Estimate, a group composed of elected officials.)

1. Amster Yard

Adding to the ability of the city to equitably compensate land owners for landmark designation was the 1969 amendment to the Zoning Resolution allowing development-rights transfer to lots within the same ownership. The first transfer of this type was the result of private sector inspiration–an owner-initiated proposal. The owner of Amster Yard, a collection of small nineteenth century residential structures, open spaces, and stores in midtown Manhattan, was allowed to transfer a portion of his development rights to a nearby parcel for use in the construction of an office building. As a condition, the city insisted upon a promise to create a $100,000 trust fund, the income of which would be used for maintenance of the landmark.[14] (see figure 3)

2. Grand Central Terminal

New York's Grand Central Terminal was designed as a monument to Commodore Vanderbilt in a lavish and palatial style evocative of both ancient Rome and Napoleonic France. For decades, it has been a landmark, known around the world as one of New York's major gateways. It was one of the first buildings to be declared a landmark by New York City Landmark

Commission. The Landmarks Law, however, protects only the facades, and is, in any case, only a procedure for delaying demolition for two years.

In 1967, the Penn Central Railroad decided to develop the air rights over the terminal by placing a large office tower over the existing building. The zoning permits a floor area ratio of 15 or 18 with a plaza. The floor area of the Terminal, despite its considerable bnlk, is only 1.5. A new office buildiug, designed by an internationally known architect Marcel Breuer, with an area of 13.5 times the four acre site was permitted by the zoning. This was a very large building indeed. But, given the generous FAR ceiling of the 1961 Resolution, the proposed building was completely within the zoning law and needed no variance or approved from the planning commission.

The Landmark Commission, however, took the positiou that a seven-hundred-foot-high office buildiug over the Terminal constituted an alteration to the facade, and they refused to approve the new building.[15]

One of the legal questions raised by this decision is whether the Landmarks Commission, by its ruling, is depriving the owners of the building of the right to do anything at all with the property. The trial court's decision did not question the constitionality of the Landmarks Preservation Law, but did find its application to the Grand Central Terminal to be an "economic hardship" because it prevented the bankrupt railroad from earning the income it would receive from the office tower.[16]

The New York City Planning Commission devised a way to give the owner of landmarks a third alternative to the eboice between demolition and the status quo. It passed a law permitting the transfer of air rights from a landmark to nearby properties. The result is that the owner of the neighboring parcel of land, some of them owned by Penn Central, can purchased some of the unused bnlk permitted by the zoning on the landmark property. The overall density of the zoning district still remains the same. The new structure that makes use of the air rights cannot he increased by more than twenty percent. This is designed to prevent excessive contrasts between the landmark and an adjacent building.

The Urban Design Group of N.Y. Plauuing Department had prepared some alternate studies showing the difference between the Penn Central plan and various possibilities created by the development rights transfer. These schemes were particularly persuasive at the Landmarks Commission's puhlic hearing in pointing out the physical effect of the Breuer schemes on future development in the area : the destruction of an invaluable "air park" over the station itself a major breathing space for midtown and for the railroad's own properties which surrounded the Terminal. The Urban Design Group sehemes would save the air park by transfering the development rights to a mumber of nearby sites also owned by the Penn Central, so that the future development picture would be much the same as it is today.

The Penn Central and the developers agreed to build under the new legislation with specific plans for an office block and a small park. This development utilized a substantial amount of the available transfer rights while "banking" the rest for future use. However, over the following six months, the office market changed, and the developer was caught in a situation where he could

neither afford to build nor get out of his contract with Penn Centrel, which was just declaring bankruptcy.[17]

3. South Street Seaport

The South Street Seaport District is another attempt by New York City to use TDR for preservation purpose. South Street Seaport comprises of blocks of small 200-year-old building which surrounded the Fulton Fish Market in lower Manhatton. The Seaport Museum grew up gradually in and around the fish market area. Some piers were leased from the city to display a collection of a half dozen interesting old ships, and the Museum rented space in a number of the neighboring historic brick building, to display a collection of ship models, painting and other artifacts of the sea. It was hoped that when the Fish Market moved to new quarters in the Bronx, the buildings around Fulton Street could he restored, and a historic district created.

Unfortunately, this whole block of buildings was threatened with demolition under the euclidean zoning designation for highest and best use. The zoning permitted much larger-scale development, and real estate interests will tear down the old buidings and replace them with a large office structure.[18]

Through an interesting combination of urban reuewal powers and special TDR district, the office of Lower Manhattan Development was able to place the block of small 200-year-old buildings which surrounded the Fulton Fish Market in a preservation category, and other parcels within the district were designated as redevelop ment areas (the Conservation Zone/Transfer Zone concept). Under an arrangement with the landowners and the city, a consortium of banks purchased the development rights, acting as a middle man, and as the city's urban renewal plan progress the development rights would he transferred to specific receiving lots[19]

4. Tudor City

Another case is Tudor City. Tudor City is a dense apartment development near the United Nations on East 42nd Street in New York City. There are two private parks in that development which have remained in park use since the project was built in the 1920s. The parks are the focus of the building. The apartment units front on these parks with very few windows facing the other direction. When they were built, there were slaughterhouses in that direction. Later on, the slaughterhouses were demolished for the construction of United Nations and the area became more fashionable.

The new owner of the Tudor City complex announced plans either to build in those parks or to shift their development right over 42nd Street in the form of a 50-storey building which would located on the major east-west axis of 42nd Street. Local residents, however, urged the city to save the forty-year old parks which are valued at more than three million dollars. The planning commission was concerned about the proposal and studied a number of alternative development techniques. The final option which was adopted prohibited any development in the private parks, limits their use to passive recreation. But this step allowed the owner of these private parks the privilege of transfering their development rights to lots within an area designated as a receiving area. The receiving area was the adjacent midtown business district. To utilize the development

rights, the receiving area had to be of sufficient size to satisfy planning concern that the larger resulting building would not be intrusive to neighbors.[20]

TDR AND HISTORIC PRESERVATION

Landmark designations, transfer of development rights, special zoning districts, and private landmarks conservancies are all tools for preserving the heritages. Their application depends upon how concerned the authorities in a particular area are about historic preservation.

Fortunately, the prevailing architectural wisdom no longer considers "modernism" a more important objective than preserving a good historic building. Zoning and other legal controls can be made more sensitive to other values than the greatest realestate return.

Now, there are new tools like TDR and banking of air rights that make preservation more practical from an economic point of view. However, saving a landmark is always going to be a difficult process that requires strong leadership by government, strong political support by concerned citizens, and of course, a cooperation from the landmark owners.

New York passed its Landmarks Preservation Law in 1965. Although the constituency for the law was large, the immediately affected class was not enthusiastic about it. In fact, many landmark owners were fighting hard to designation. They feel that designation is taking without compensation.

When TDR was suggested in New York, it had not been tried elsewhere in the country.[21] The proposal was not a mandatory control but rather an optional procedure. After a number of proposals have been made as we mentioned earlier, it was clear that the technique would not work in many instances. It was also clear, however, that the technique offered great psychological sustenance to the owners of landmarks. Owners became less resistant to designate by the Landmark Preservation Commission because of this new tantalizing possibility that the zoning affordedthem.

CONCLUSION

TDR programs have been devised in many areas for specific purposes. Some have been drafted by multidisciplinary teams of planners, attorneys, economists, and engineers; still others have been prepared by planning consultants. Some have been created to preservespecified landmarks, others to preserve recreational amenities, and still others for multiple objectives. Some are called transfer of development rights, others, development rights develop transfers. Some have been created to accommodate growth while preserving open space, others have been created with the goal of maintaining an exclusionary atmosphere.

New York City has developed and refined a series of TDR as a tool to shape the nature of private development. The techniques that have been used raise interesting questions about the legitimate extent of government control over private properties. But most of all, TDR provides a third alternative for both historic landmark owners and planning officials besides demolition and the status quo. However, the successful of TDR technique in preserving landmark requires strong leadership by local government, strong political support by concerned citizens, and most of all, a collaboration of the owners.

In conclusion, TDR in USA is beginning to develop into a tool that has been applied to a variety of land use situations and has received limited recognition by the courts. Many of the initial questions have been clarified. It now remains to be seen what varieties of TDR best suit given local conditions, and whether state governments will step forward to standardize TDR programs or continue to leave that role to local governments.

In case of Thailand, TDR has never been proposed or used anywhere in the country. To some extend, TDR is an "alien" which most of us never realize its existence and potential. It is my believe that some areas in Bangkok such as Rattanakosin City, TDR might be useful. It is interesting to find the way in utilizing TDR as alternative tool and technique for urban development and historic preservation, rather them rely heavily on ineffective existing law and planning practice. Whenever we decide to change our direction to explore an innovative approach, a careful planning study and a lot of radical change in existing law will be required.

NOTES

1. F. Schnidman, "Transferable Development Rights" in D.G Hagman et al, *Windfalls For Wipeouts*, ASPO. Chicago, 1978 pp. 532.
2. An excellent discussion of the legal precedents for a development rights system is : D. Carmicheal, *Transferable Development Rights as a Basic for Land Use Control*, 2 Fla. State U.L. Rev. 35, 1974, pp. 53–99.
3. R. Wrights, *The Law of Airspace*, 1968, pp. 259–260.
4. F. Schnidman, "Transferable Development Rights", pp. 534.
5. See Real Estate Research Corporation, Air Rights and Highways, *U.L.I. Technical Bulletin 64*, 1969.
6. F. Schnidman, "Transferable Development Rights", pp. 535.
7. D. Carmicheal, "Transferable Development Rights as a Basie for Land Use Control", in J. Rose, *Transfer of Development Rights*, Center for Urban Policy Research, Rutgers, New Brunswick, 1975, pp. 38–43.
8. See P. Pizor, "A Reveiw of Transfer of Development Rights," *The Appraisal Journal*, July 1978, pp. 386.
9. J. Rose, "A Proposal for Separation and Marketability of Development Rights As a Technique to preserve Open Space", in *Transfer of Development Rights*, CUPR, Rutger, pp. 186–199.

   J. Costonis, and R. DeVoy, "The Peurto Rican Plan Environmental Protection Through Development Rights Transfer", in *Transfer of Development Rights*, pp. 200–209.
10. For more detail see F. Schnidman, *Transferable Development Rights*, pp. 539–544.
11. J. Rose, *Transfer of Development Rights*, pp. 7–19.
12. D. Richards, "Development Rights Transfer in New York City" in J. Rose, *TDR*. pp. 123–156.
13. Ibid.
14. D. Elliott and N. Marcus, "From Euclid to Ramapo : New Direction in Land Development Controls" in J. Rose, *TDR*. pp. 157–164.
15. J. Barnett, *Urban Design As Public Policy*, Architectural Record Book, McGraw–Hill, New York, 1974, pp. 71.
16. Ibid.
17. Ibid pp. 74.
18. N. Marcus "TDR and Historic Preservation" in *Transferable Development Rights*. ASPO Planning Advisory Service Report No. 304, Chicago. Ill., 1975, pp. 3–5.
19. Ibid.
20. D. Eliott and N. Marcus "From Euclid to Ramapo"
21. N. Marcus "TDR and Historic Preservation"

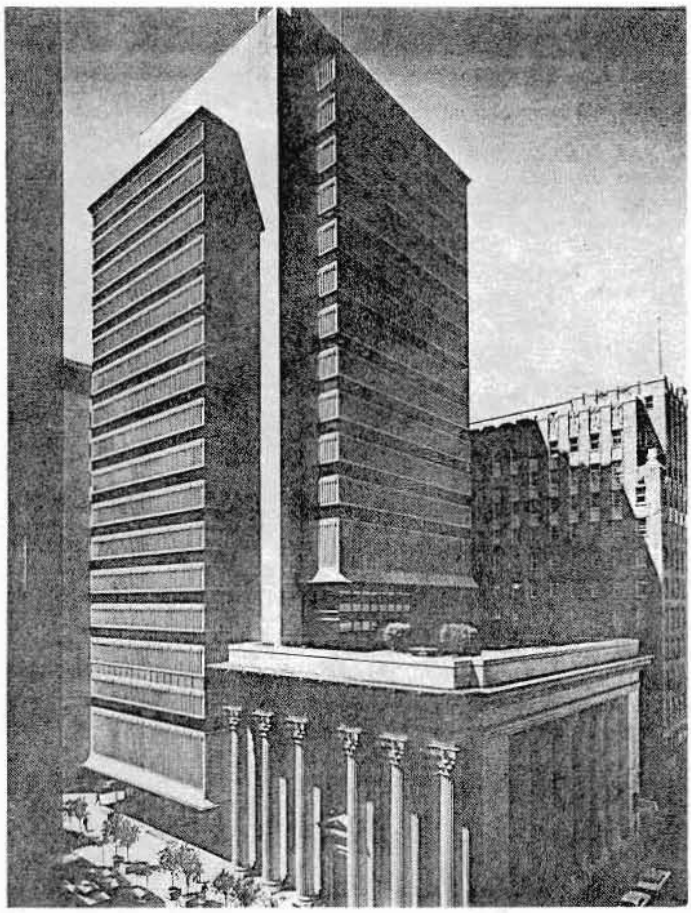


Figure 1. INTEGRATION OF THE OLD AND THE NEW ON A SINGLE SITE : ANOTHER PRESERVATION SOLUTION

Sensitive design and thoughtful concern for values not recorded on the balance sheet can often provide a solution other than demolition. They resulted in the preservation of San Francisco's Bank of California building constructed in 1908 and designed by Bliss and Faville. Despite the small site, the Bank of California erected a new twenty-one-story structure-tower by use of a cantilever over the 1908 building and a combination of the floor area ratio of both portions of the site. The 1908 building, which is still in active use, was declared a San Francisco landmark in 1968. (From Space Adrift, by John Contonis)

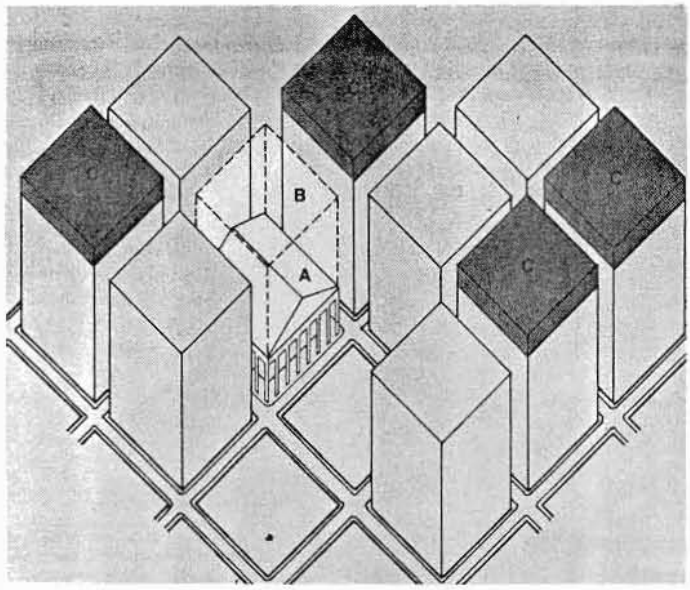


Figure 2. Development Rights Transfer

The landmark building (A) utilizes only a fraction of the development rights of the site, the remainder of which (B) are transferred to various other sites within a transfer district and appear as additional bulk (C) on neighboring buildings. (From Space Adrift, by John Contonis)

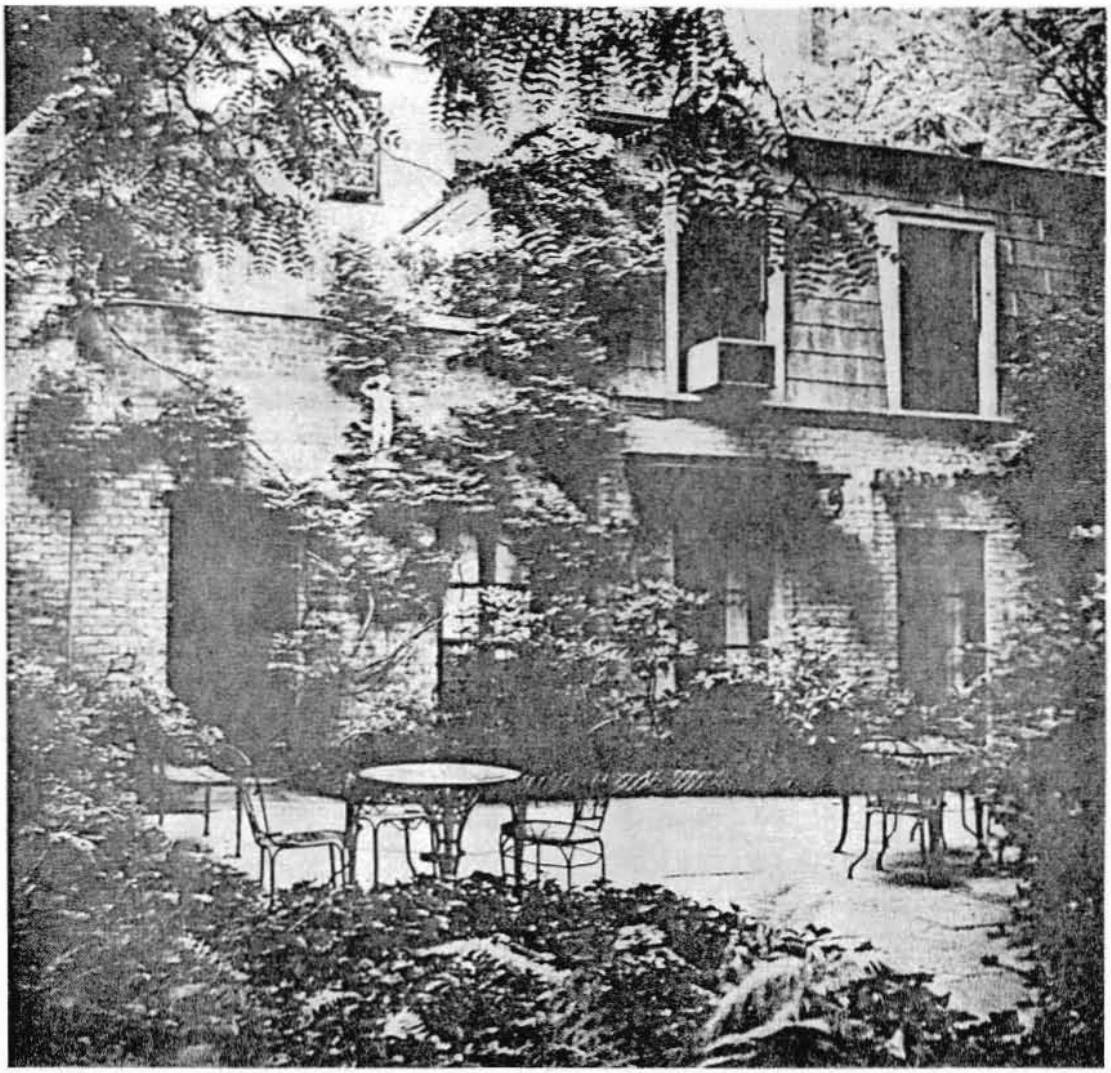
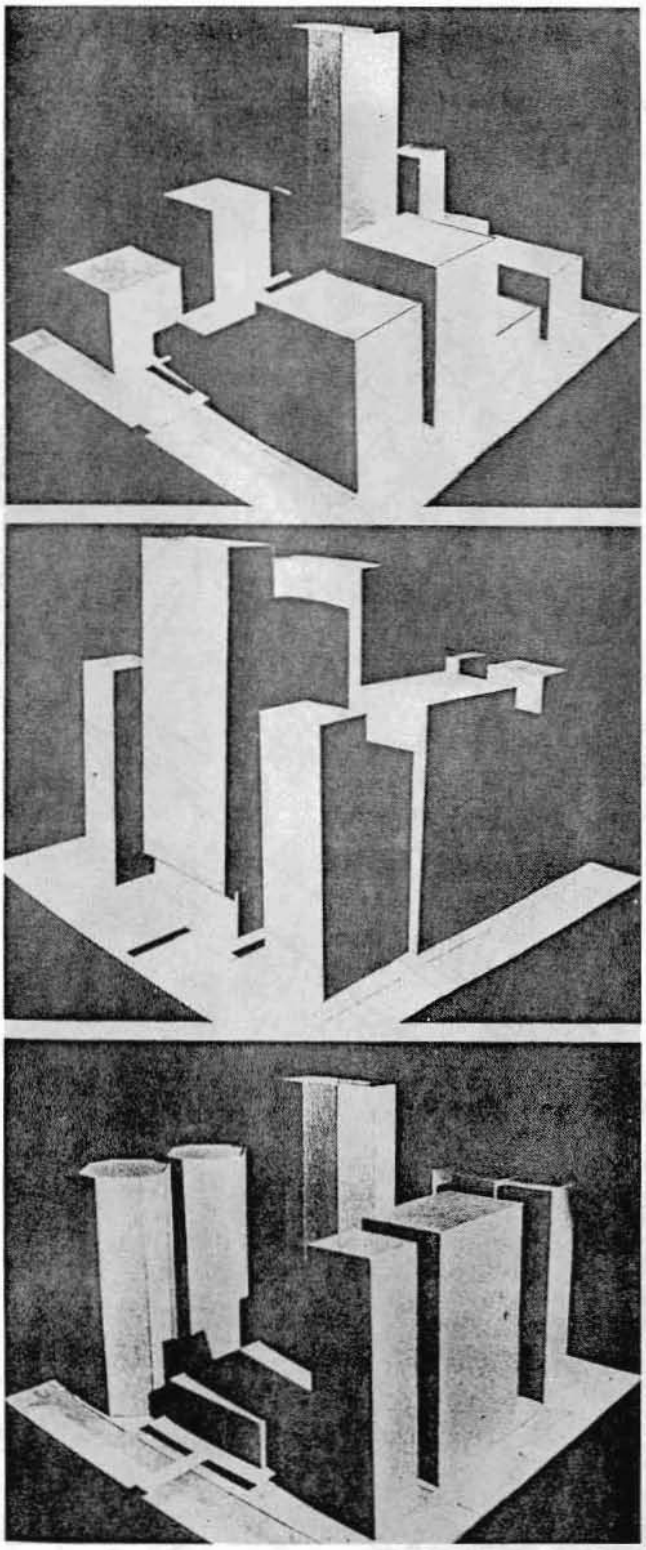


Figure 3. Amster Yard, New York City





One of the proposals by the architect, Marcel Breuer, for a building over Grand Central Terminal. This version would have removed much of the principal facade and obscured the rest.

Block model shows the area around Grand Central Terminal. Above, the existing buildings; at center, the Breuer proposal, plus expected; future development; then, below, the Urban Design Group proposal, using air-rights transfer legislation.

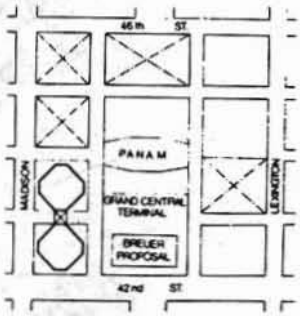


Figure 4. Grand Central Terminal Proposal.

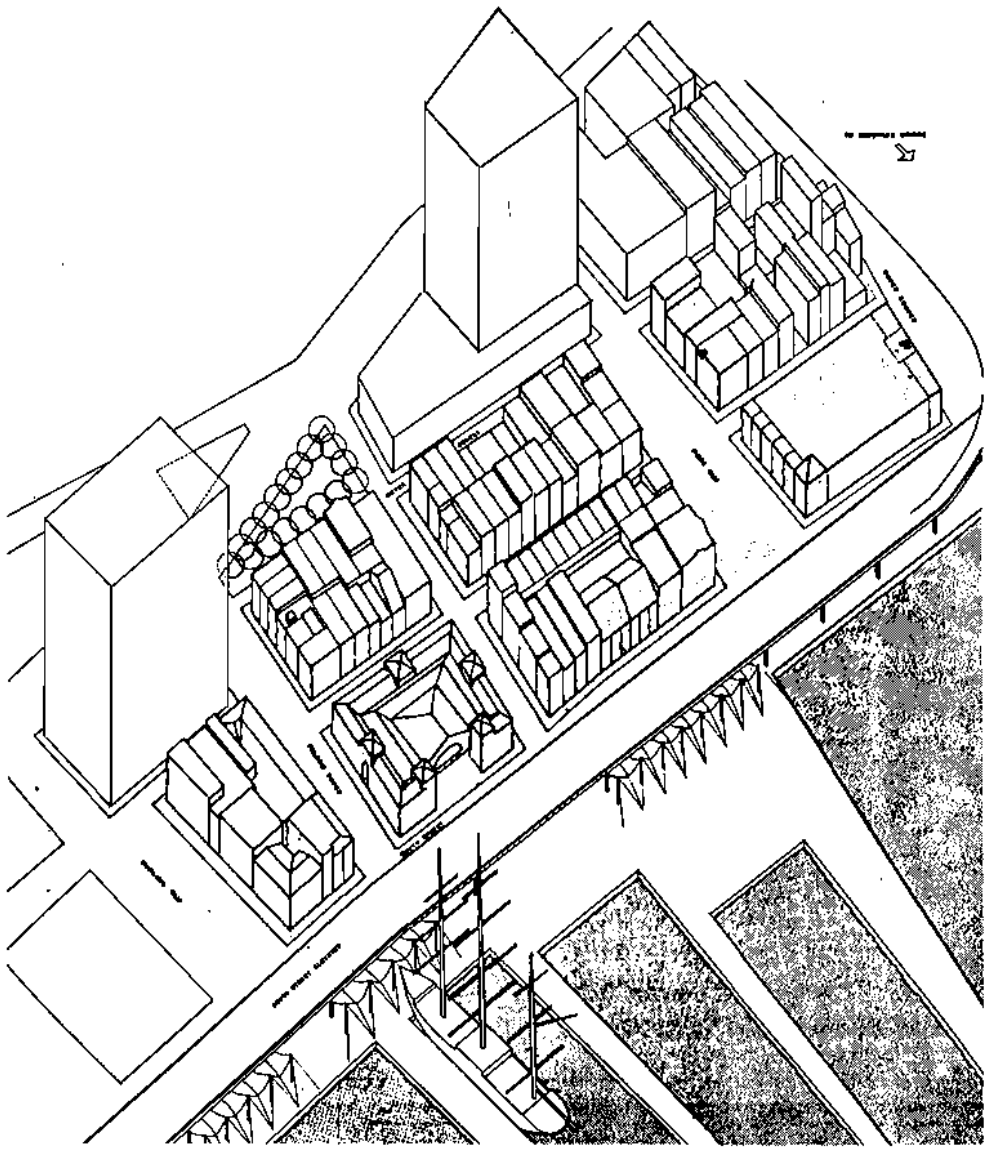


Figure 5. South Street Seaport Proposal